



## Electrical Manipulation of Bioparticles in Microfluidics

Guest Editor:

**Dr. Soumya Srivastava**

Department of Chemical and  
Biomedical Engineering, West  
Virginia University, 1306  
Evansdale Dr., P.O. Box 6102,  
Morgantown, WV 26506-6102,  
USA

Deadline for manuscript  
submissions:  
**closed (30 June 2023)**

### Message from the Guest Editor

This Special Issue aims to focus on applications in the field of disease diagnostics that utilize electrokinetics to manipulate and characterize infected bioparticles ranging from cells to proteins. Submissions integrating modeling and experimentation are preferred.

Contributions may be (i) research articles with original results or (ii) critical reviews, which may also contain original results focusing on novel methodological developments and applications pertaining to the electrical manipulation of bioparticles at micro and sub-micro scales. The subjects of the upcoming issue could include, but are not limited to:

- Electrokinetics in microchannels and nanochannels;
- Dielectric spectroscopy;
- Traveling wave dielectrophoresis;
- Dielectrophoretic enrichment, separation, and manipulation;
- Organ-on-a-chip with electrical stimulations;
- Biosensors integrated with microchips utilizing an electric field to manipulate bioparticles;
- AI/ML applications with microchips utilizing an electric field to manipulate bioparticles.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China  
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

## Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

**Journal Rank:** JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Mechanical Engineering*)

## Contact Us

---

*Micromachines* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/micromachines](http://mdpi.com/journal/micromachines)  
[micromachines@mdpi.com](mailto:micromachines@mdpi.com)  
[X@micromach\\_mdpi](https://twitter.com/micromach_mdpi)